



The IJA appears now exclusively as a peer-reviewed on-line Open Access journal at <http://www.siamb.org.il>



Detection of KHV in Freshwater Mussels and Crustaceans from Ponds with KHV History in Common Carp (*Cyprinus carpio*)

Maciej Kielpinski^{1*}, Jolanta Kempster¹, Remigiusz Panicz¹,
Jacek Sadowski¹, Heike Schütze², Stefanie Ohlemeyer²,
Sven M. Bergmann²

¹ Department of Aquaculture, Agricultural University, ul. K. Krolewicza 4,
71-550 Szczecin, Poland

² Friedrich-Loeffler-Institut (FLI), Federal Research Institute for Animal Health,
Institute of Infectology, Südufer 10, D-17493 Greifswald-Insel Riems,
Germany

(Received 30.6.09, Accepted 13.8.09)

Key words: koi herpesvirus detection, freshwater mollusks, PCR

Abstract

Characterization of asymptomatic KHV carriers may help understand virus transmission and storage. Such information allows farmers to minimize KHV on farms where this virus is present, also in common carp (*Cyprinus carpio*) monocultures. As asymptomatic KHV carriers, freshwater mollusks from the Unionidae family (swan mussels, *Anodonta cygnea*) and crustaceans from the Gammaridae family (scud, *Gammarus pulex*) were studied because of their unique method of feeding by accumulating bacterial and viral particles. The KHV genome was detected by nested PCR and confirmed by PCR recognizing the KHV glycoprotein gene in ORF 56 (KHV-U). Both PCR and nested PCR, which recognize the KHV thymidine kinase gene, always produced negative results in the swan mussels and scud samples.

* Corresponding author. E-mail address: maciej.kielpinski@zut.edu.pl